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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,923	10/30/2001	Keicy K. Chung	264/031	7533

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EXAMINER

REFAI, RAMSEY

ART UNIT PAPER NUMBER

2152

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/017,923	Applicant(s) CHUNG, KEICY K.	
	Examiner Ramsey Refai	Art Unit 2152	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

DETAILED ACTION

*Response to Amendment*

Responsive to Amendment received July 14, 2006. Claims 1-16 remain presented for further examination.

*Response to Arguments*

1. Applicant's arguments have been fully considered but they are not persuasive.

- In the remarks, the Applicant argues in substance:

Argument A: *Jacobs et al fail to teach a processor or storage device is localized to the computer.*

In response, the Examiner respectfully disagrees. Since the specification does not describe what the term “ localized” means and how the processor or storage device is “ localized” to a computer, the ability of the computer in Jacobs et al to communicate with the processor in the storage device (cache server 102) makes that processor localized to the computer. Therefore, Jacobs meets the scope of the claimed limitation.

Argument B: *Jacobs et al fail to teach a computer interface being adapted to enable communications exclusively between the computer and the storage device,*

In response, the Examiner respectfully disagrees. The Applicant argues that the specification teaches that the computer interface can be one of many known formats such as IDE, ATA, SCSI, and IEEE 1394, which are known to connect and allow communications exclusively between a single computer and a single storage device, therefore the computer interface operates exclusively with the storage device. However, these types of format have not been claimed. The claims merely recite that the computer interface operates exclusively with the storage device. No definition or clear understand of how the computer operates *exclusively* can be ascertained from the applicant' s specification. Jacobs et al teach that the user can communicate with the

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cache server without the need to communicate with any other device in order to connect to the cache server. Jacobs et al also teach that the cache server can be designated to handle only specific types of requests by examining the header of the request, to determine a security profile, the user sending the request, etc. (See fig 4, column 13, lines 25-55). Furthermore, Jacobs et al teach that the medium which data requests are received may include direct or indirect communication using wired or wireless communication. (See column 6, lines 5-11). Therefore, Jacobs et al meets the scope of the claimed limitation.

Argument C: *Jacobs et al fail to teach a processor is adapted to employ the network interface for communications exclusively with the remote file server.*

In response, the Examiner respectfully disagrees. Jacobs et al teach that the cache server can be co-located with the server that the communication medium may be direct or indirect communication. (See column 6, lines 5-11).

*Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 7 and 9 are rejected under 35 U.S.C. 102(e) as being unpatentable by Jacobs et al (U.S. Patent No. 6,732,237).

4. As per claim 7 A method of providing a file to a computer comprising:

receiving in a storage device a request from the computer for the file, wherein the storage device is localized to the computer and includes a storage means and a computer

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interface, the computer interface being adapted to enable communications exclusively between the computer and the storage device; (Figure 1, Figure 3, 300)

determining whether the file is cached on the storage means (Fig 3, column 16, lines 42-53);

determining, if the file is not cached on the storage means, whether the file is available from a remote file server, and if the file is available from the remote file server, retrieving the file from the remote file server (fig 3, column 16, column 16, lines 50-57 and

caching the retrieved file on the storage means; and providing to the computer the file on a read-only basis if the file is cached on the storage means (Figure 3, column 16, lines 64-65, column 11, lines 1-2).

5. As per claim 9, Jacobs et al teach deleting the cached file from the storage means upon receiving a command from the file server to delete the cached file (column 6, lines 39-47).

*Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-6, 8, 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs et al (U.S. Patent No. 6,732,237) in view of " Official Notice" .

8. As per claim 1, Jacobs et al teach a storage device comprising:

a processor localized to a computer; a computer interface communicably connected to the processor, wherein the computer interface is adapted to enable communications exclusively between the computer and the processor; a network interface communicably connected to the

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processor to enable the processor to communicate with a remote file server, wherein the processor is adapted to employ the network interface for communications exclusively with the remote file server (Figure 1, column 4, lines 15-37); and

a storage means communicably connected to the processor, the processor being adapted to have read and write access to the storage means, wherein upon receipt of a file request from the computer (Figure 3, 300) the processor is adapted to sequentially (1) determine whether the file is cached on the storage means and provide the file to the computer on a read-only basis if the file is cached on the storage means (Figure 3, 302; column 9, lines 3-21), (2) request the file from the file server if the file is not cached on the storage means, and if the file is obtainable from the file server, cache the obtained file on the storage means and provide the obtained file to the computer on a read-only basis (Figure 3).

Jacobs et al fail to explicitly teach that the processor returns a file unavailable notice to the computer if the file is not cached on the storage means and not obtainable from the file server. However, However, " Official Notice " is taken that both the concept and advantage of using a file unavailable notice such as a " 404-File Not Found " error message is well known and expected in the art. It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to include a file unavailable notice in Jacobs et al' s system because doing so would inform a user that the data that the user has requested is unavailable.

9. As per claims 2, Jacobs et al teach wherein the computer is communicably connected to a network server through the network interface (Figure 1, column 4, lines 15-37).

10. As per claim 3, Jacobs et al teach wherein the storage means comprises random access media (Figure 1, column 4, lines 15-37).

11. As per claim 4. A computer network comprising:

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a file server; a network server; a computer communicably connected to the network server, the computer being remotely disposed from the file server and the network server (Figure 1);

a storage device (cache server) communicably connected to the computer and the file server, the storage device being localized to the computer and comprising a processor, a computer interface, a network interface, and a storage means wherein the computer interface is adapted to enable communications exclusively between the computer and the storage device; the processor is adapted to employ the network interface for communications exclusively with the remote file server ; the processor is adapted to have read and write access to the storage means (Figure 1, column 4, lines 15-37); and

upon receipt of a file request from the computer (Figure 3, 300) the processor is adapted to sequentially (1) determine whether the file is cached on the storage means and provide the file to the computer on a read-only basis if the file is cached on the storage means (Figure 3, 302; column 9, lines 3-21), (2) request the file from the file server if the file is not cached on the storage means, and if the file is obtainable from the file server, cache the obtained file on the storage means and provide the obtained file to the computer on a read-only basis (Figure 3).

Jacobs et al fail to explicitly teach that the processor returns a file unavailable notice to the computer if the file is not cached on the storage means and not obtainable from the file server. However, However, “ Official Notice” is taken that both the concept and advantage of using a file unavailable notice such as a “ 404-File Not Found “ error message is well known and expected in the art. It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to include a file unavailable notice in Jacobs et al’ s system because doing so would inform a user that the data that the user has requested is unavailable.

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12. As per claim 5, Jacobs et al teach wherein the computer is communicably connected to the network server through the storage device (Figure 1, column 4, lines 15-37).

13. As per claim 6, Jacobs et al teach wherein the storage means comprises random access media (Figure 1, column 4, lines 15-37).

14. As per claim 8, Jacobs et al fail to teach providing to the computer a response indicating that the file is not available if the file is not cached on the storage means. However, However, " Official Notice" is taken that both the concept and advantage of using a file unavailable notice such as a " 404-File Not Found " error message is well known and expected in the art. It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to include a file unavailable notice in Jacobs et al' s system because doing so would inform a user that the data that the user has requested is unavailable.

15. As per claims 11 and 14, Jacobs et al contains the similar limitations as claim 1, but now teaches that the file is a bootstrap file or an operating system file. Although Jacobs et al does not explicitly teach that the particular file type is a bootstrap file or an operating system, Jacobs et al do teach that the requested data maybe include textual, numerical, multi-media, or other types and forms of information suitable for transmission to a user through a network and may adhere to any of a variety of protocols or formats (e.g. HTTP, FTP, HTML, XML) (column 5, line 66-column 6, line 5). It would have been obvious to one of the ordinary skill in the art at the time of the applicant' s invention to recognize that it was merely a matter of choice of implementation, which clearly does not require any inventive step. Since the determination process is accomplished by assigning file names, extensions or the like, as a determination parameter, changing the file type is obvious and is not patentably distinct over Jacobs et al.

16. As per claim 12, Jacobs et al teach wherein the computer is communicably connected to a network server through the network interface (Figure 1, column 4, lines 15-37).



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17. As per claim 13, Jacobs et al teach wherein the storage means comprises random access media (Figure 1, column 4, lines 15-37).

18. As per claim 15, Jacobs et al teach wherein the computer is communicably connected to the network server through the storage device (Figure 1, column 4, lines 15-37).

19. As per claim 16, Jacobs et al teach deleting the cached file from the storage means upon receiving notice from the file server that an updated version of the cached file is available (column 6, lines 39-47).

### *Conclusion*

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Refai whose telephone number is (571) 272-3975. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramsey Refai  
Examiner  
Art Unit 2152  
September 20, 2006



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SUPERVISORY PATENT EXAMINER